

Application Serial No.: 10/026,152
Filing Date: 12/21/2001

Reply to Office Action of: 02/28/2005
Attorney Docket No.: K35R1732

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in this application:

Listing of Claims:

1 - 29. (Canceled)

30. (Previously presented) A method of manufacturing a head gimbal assembly for use in a data storage system, comprising:

fabricating a slider having an air bearing surface and a backside that opposes the air bearing surface;

depositing a plurality of solder bumps on the backside;

positioning the slider adjacent to a flexure having at least a thermally conductive flexure tongue coated with an insulation layer, and a pattern of receptacles that extend through the insulation layer to the flexure tongue, such that the solder bumps are substantially aligned with the receptacles;

directing a laser beam to the flexure tongue to heat the flexure tongue sufficiently to melt the solder bumps.

31. (Previously presented) The method of claim 30, further comprising metalizing the backside.

32. (Previously presented) The method of claim 30, wherein the flexure tongue includes stainless steel.

33. (Previously presented) The method of claim 30, wherein the insulation layer includes polyimide.

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34. (Previously presented) The method of claim 30 wherein at least one receptacle is substantially cylindrically shaped.

35. (Previously presented) The method of claim 34, wherein the at least one receptacle has a radius of approximately 75 microns.

36. (Previously presented) The method of claim 34 wherein the at least one receptacle has a depth and a radius that is greater than the depth.

37. (Previously presented) The method of claim 30, wherein at least one solder bump is substantially hemispherical in shape.

38. (Previously presented) The method of claim 36, wherein at least one solder bump has a radius of approximately 80 microns.

39. (Previously presented) The method of claim 30, further comprising extending the receptacles through the flexure tongue.